

AMENDMENTS TO THE CLAIMS

In the Claims:

Please amend the claims as indicated below:

1. (Currently Amended) A vehicle hinge assembly for hinging a vehicle door on a vehicle body, the assembly comprising a first hinge leaf hingedly connected to a second hinge leaf by a pivot pin, the pivot pin being immovably mounted in a first blind bore in one hinge leaf and being rotatably mounted in, and being axially withdrawable from, a second blind bore in the other hinge leaf, and hinge pin retention means associated with said other hinge leaf for preventing axial withdrawal of the hinge pin therefrom, the hinge pin retention means having hinge pin engagement means movably mounted on said other hinge leaf for movement between first and second positions, the engagement means including a spherical surface of a given radius seated in an annular groove of a curved section, the curved section having a radius of curvature the same as said given radius so as to permit rotation of the hinge pin but prevent any axial movement of the hinge pin relative to said other hinge leaf, and in its second position being spaced from the hinge pin to permit its axial withdrawal from said other hinge leaf, wherein said hinge pin engagement means is a ball bearing located in an externally threaded housing which is movably mounted in a threaded bore formed in said other hinge leaf for movement between said first and second positions, said housing when in said first position maintaining said ball bearing in engagement with said annular groove wherein the housing is screw threadedly mounted in said bore so as to be movable therealong by a screw action.

2. (Currently Amended) A vehicle hinge assembly for hinging a vehicle door on a vehicle body, the assembly comprising:

a first hinge leaf hingedly connected to a second hinge leaf by a pivot pin, the pivot pin being immovably mounted in one hinge leaf and being rotatably mounted in, and being axially withdrawable from, the other hinge leaf, and

hinge pin retention means associated with said other hinge leaf for preventing axial withdrawal of the hinge pin therefrom, the hinge pin retention means having hinge pin engagement means movably mounted on said other hinge leaf for movement between first and second positions, the engagement means including a spherical surface of a given radius seated in an annular groove of a curved section, the curved section having a radius of curvature the same as said given radius so as to permit rotation of the hinge pin but prevent any axial movement of the hinge pin relative to said other hinge leaf, and in its second position being spaced from the hinge pin to permit its axial withdrawal from said other hinge leaf,

wherein said hinge pin engagement means is a ball bearing located in an externally threaded housing which is movably mounted in a threaded bore formed in said other hinge leaf for movement between said first and second positions, said housing when in said first position maintaining said ball bearing in engagement with said annular groove wherein the housing is screw threadedly mounted in said bore so as to be movable therealong by a screw action, wherein said ball bearing is at least partially located within said housing.

3. (Previously Presented) A hinge assembly according to Claim 2 wherein the housing is screw threadedly mounted in said bore so as to be movable therealong by a screw action.

4. (Previously Presented) A hinge assembly according to Claim 3, the ball bearing is rotatably mounted in said housing.

5. (Cancelled).

6. (Previously Presented) A hinge assembly according to Claim 2 the ball bearing and said annular groove each have the same radius of curvature.

7. (Cancelled).

8. (Previously Presented) A hinge assembly according to Claim 2, wherein each hinge leaf comprises a body cast from a metal to define a shell including a boss having a bore in which the hinge pin is located.

9. (Previously Presented) A hinge assembly according to Claim 6, wherein the annular groove has a depth which is less than the radius of curvature of the ball bearing.

10. (Previously Presented) A hinge assembly according to Claim 8 wherein the bore housing said ball bearing is formed in a wall projection integrally cast with said boss of said other hinge leaf, said wall projection being interleaved with said one hinge leaf over a predetermined angular range of movement about said hinge pin in order to prevent axial separation of the hinge leafs.

11. (Previously Presented) A hinge assembly according to Claim 2, the ball bearing is rotatably mounted in said housing.

12. (Cancelled).

13. (Previously Presented) A hinge assembly according to Claim 3 wherein the ball bearing and said annular groove each have the same radius of curvature.

14. (Previously Presented) A hinge assembly according to Claim 4 wherein the ball bearing and said annular groove each have the same radius of curvature.

15. (Previously Presented) A hinge assembly according to Claim 2 wherein the ball bearing and said annular groove each have the same radius of curvature.

16. (Previously Presented) A hinge assembly according to Claim 3, wherein each hinge leaf comprises a body cast from a metal to define a shell including a boss having a bore in which the hinge pin is located.

17. (Previously Presented) A hinge assembly according to Claim 4, wherein each hinge leaf comprises a body cast from a metal to define a shell including a boss having a bore in which the hinge pin is located.

18. (Previously Presented) A hinge assembly according to Claim 2, wherein each hinge leaf comprises a body cast from a metal to define a shell including a boss having a bore in which the hinge pin is located.

19. (Previously Presented) A hinge assembly according to Claim 6, wherein each hinge leaf comprises a body cast from a metal to define a shell including a boss having a bore in which the hinge pin is located.

20. (Previously Presented) A hinge assembly according to Claim 1, wherein each hinge leaf comprises a body cast from a metal to define a shell including a boss having a bore in which the hinge pin is located.

21. (Previously Presented) A hinge assembly according to Claim 16 wherein the bore housing said ball bearing is formed in a wall projection integrally cast with said boss of said other hinge leaf, said wall projection being interleaved with said one hinge leaf over a predetermined angular range of movement about said hinge pin in order to prevent axial separation of the hinge leaves.

22. (Previously Presented) A hinge assembly according to Claim 17 wherein the bore housing said ball bearing is formed in a wall projection integrally cast with said boss of said other hinge leaf, said wall projection being interleaved with said one hinge leaf over a

predetermined angular range of movement about said hinge pin in order to prevent axial separation of the hinge leafs.

23. (Previously Presented) A hinge assembly according to Claim 18 wherein the bore housing said ball bearing is formed in a wall projection integrally cast with said boss of said other hinge leaf, said wall projection being interleaved with said one hinge leaf over a predetermined angular range of movement about said hinge pin in order to prevent axial separation of the hinge leafs.

24. (Previously Presented) A hinge assembly according to Claim 19 wherein the bore housing said ball bearing is formed in a wall projection integrally cast with said boss of said other hinge leaf, said wall projection being interleaved with said one hinge leaf over a predetermined angular range of movement about said hinge pin in order to prevent axial separation of the hinge leafs.

25. (Previously Presented) A hinge assembly according to Claim 20 wherein the bore housing said ball bearing is formed in a wall projection integrally cast with said boss of said other hinge leaf, said wall projection being interleaved with said one hinge leaf over a predetermined angular range of movement about said hinge pin in order to prevent axial separation of the hinge leafs.
